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UNDERSTANDING CONSUMERS' RISKS PERCEPTION FOR BANKING ON THE INTERNET

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ABSTRACT
In this day and age, the internet technology is playing a most important role for the world of business including the banking industry. Banks have been using the Internet platform as one of their distribution channels because Internet Banking services benefit both the banks and their customers and the low cost of internet banking may enable banks to reach new customers. Consumer risk is a significant factor both in consumer perception and intention to use internet banking. This empirical study examines consumer risk in internet banking in a risk based state of associations. This study enhances the understanding of risk in the Internet banking context and discusses some risk factors possibly facilitating expectation of differences in consumers' mind towards internet banking.

KEYWORDS: Non Consumer risk, security, internet banking, internet technology.

INTRODUCTION

The development of internet technologies has positively changed the traditional delivery channel of banking services to customer, and banks are determined to find out more on the magnetism of using these substitute channels to consumers at large. The developing of Internet banking has motivated many banks to lay emphasis on information technology strategies in order to stay ahead. Internet banking formed significance for the bank in terms of cost, customer service, and profit. Unhappily, customer adoption of Internet banking still has not been in acceptable stage among Indian customers. All consumers' are inclined about doing financial transaction or banking on the internet. Consumers' attitude towards banking via the Internet is not as positive as their attitude towards email, social networking or online bookings etc. While Internet banking offers banks a new distribution channel for competition in the global banking market. Despite the rapid growth of internet, consumers are still cautious to transact online through the internet mainly due to the different types of risks as they observe. The observed risks originate from the consumer's inability to try on financial transaction over the internet and to evaluate it in relation to the traditional banking. The online banking thus posses a problem because consumers are not able to physically handle the items of transaction what they carry out in bank. The inability to assess and evaluate transaction physically through the Internet is therefore one of the more significant risks that consumers may experience in terms of internet banking .The piece of information that online consumers' can not handle and try transaction before making a decision leads to inadequate bank-website interaction, compared to direct banking experience when banking in bank . Direct banking experience leads to stronger beliefs and attitudes toward the transaction than does indirect banking experience through online. The inability to directly experience the transaction leads to reluctance to bank online. Another type of risk like perceived risks refers to the consumer's anticipation of negative results or expectation of loss due to transaction. Perceived risk can be of different types: functional risk, physical risk, financial risk, social risk, psychological risk, and time risk. The types of risks most often connected with banking transaction include economic/financial, social, psychological and performance/functional risks. Functional or performance risk occurs when the innovation chosen might not perform as desired and thus might not deliver the benefits promised by the bank. Physical risk refers to possible damage that may come to the consumer as a result of the transaction. Consumers' concern regarding the safety of the transactions, as well as security, privacy and correct product information, are all physical risks to which they are exposed in terms of online banking. Economic or financial risk involves the fear of possible loss of money or other resources. Time risk is the loss of time spent in doing transaction. This pertains to the time that may be wasted if the online-banking process is unsatisfactory. Risk can also be implied by certain characteristics of the consumer. Some consumers can more easily take up the financial, physical and functional risks associated with adopting an innovation. Certain consumers' behavior and character are more prone to accept new practices regardless of the risk associated with it. Psychological risks are often caused by conflict with consumers' prior beliefs.

LITERATURE REVIEW

Risk and security of transactions on the internet banking is a blistering issue and it is an important factor that customers consider before adopting or using internet banking. Some customers avoid internet banking as they perceive it as being easily prone to dishonesty. This perception damage consumers' assurance of the internet banking system.

According, Sathye (1999), 73% avoided the adoption of online banking because they are concerned about safety and security of transactions over the internet. The issue of trust is more important in online as opposed to offline banking because transactions of this nature contain sensitive information and parties involved in the financial transaction are concerned about access to critical files and information transferred via the Internet (Alsajjan and Dennis, 2006; Suh and Han, 2002)[25]. The importance of security and privacy to the acceptance of internet banking has been noted in many banking studies (Sathye, 1999; Hamlet and Strube, 2000; Tan and Teo, 2000; Polatoglu and Ekin, 2001; Black et al., 2002; Giglio, 2002; Howcroft et al., 2002) [26]. To be more precise, privacy and security were found to be significant obstacles to the adoption of internet banking in Australia (Sathye, 1999). Roboff and Charles (1998) found that people have a weak understanding of online banking security risks although they are aware of the risks. Furthermore, they found that consumers often trust that their bank is more concerned about privacy issues and will protect them. Finally they argue that although consumers' confidence in their bank is strong, their confidence in technology is weak (Howcroft et al., 2002). Time savings appears an important aspect of the convenience of online services (Bellman et al., 1999; Dellaert and Kahn, 1999) [23]. Consumer concerns about internet security, privacy and trust have also been noted by many experts (e.g. Miyazaki and Fernandez, 2001; Gefen et al., 2003; Nissenbaum, 2004). The researchers identified three types of influential costs i.e. procedural, financial and relational, further divided into categories of: economic risk, evaluation, learning, and set-up, benefit, monetary loss, personal relationship loss, and brand relationship loss, complexity, and heterogeneity, breadth of service use, personal modification, alternative experience and switching experience.

RESEARCH OBJECTIVES

The purpose of the study was to explore, describe and get a better understanding of the role that risk perception plays in consumers' adoption of the Internet banking.

METHODOLOGY

Sampling and analysis

A systematic sampling technique was used to select the required number of bank's customers from each branch. A sample of 260 of the bank's customers was used. The respondents consisted of 65% of males and 35% of females, with an average of 31 years old, ranging from 21 to 55 years old. Chi-square tests were conducted on the gender and marital status. The results indicated that gender was significant (chi-square at 15.534, $p<0.05$) in differentiating the group, whereas marital status (chi-square at 2.977, $p=0.327$) was insignificant. This shows that gender would be a significant predictor in its ability to tell whether the respondent is a trial group or otherwise. Independent t-test was conducted on the mean of the others demographic profile of age, year of education and annual family income bracket, results detailed in

Table-1 t-test for services offered by Internet Banking

Services Requested	t-test significance
Inter account funds transfer	0.257
Foreign transfer	0.011
Payment to other personal account	0.017
Order Cheque Books	0.227
Savings Deposit account status	0.094
Loan	0.019
Other transactions	0.024
Debit/Credit Card	0.032

Mostly used services are inter account transfer, payment to other personal account, transfer to credit card account, sending order transactions, savings, current and fixed deposit account application and debit/ credit card. To better assess this statement, t-tests were also performed and the results displayed in Table 1. However, the t test also illustrates that deposit account status is a mostly common service among Internet banking users To examine whether the demographic variables of the respondent affect the adoption of internet banking, the demographic variables of the internet banking users are also compared to the non internet banking users. The younger the generation the more they are used to the new technological advancements as compared to the older generation, thereby they are more likely to adopt Internet banking; The higher the education level achieved, the greater the probability of the customer adopting Internet banking; The higher the income ladder, that is the more affluent people are more likely to possess a personal computer, thus the more the tendency to use Internet banking. Based on the above-mentioned demographic variables, the 2 groups of users were further compared i.e. internet banking users and non-internet banking users using the z-test.

Moreover, there is no significant difference between the education level of the respondents and their preference for either conventional (non-Internet banking users) and Internet banking users. However, the mean monthly income is seen to be significant.

Table-2 Demographic characteristics and preference for internet banking

Demographic variables	Users	Non-Users	Significance
Age	31	34	0.105
Income	Rs-24,300	Rs-22,000	0.045
Education	2.67	2.23	0.507

Factor Analysis

The respondents were requested to rank the statements on a 7-point scale basis (1=Strongly agree, 4=Neutral, 7=Strongly disagree). Factor analysis was carried out on the consumer's risk perception towards internet banking and their influencing factors that are highly correlated.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.678
Bartlett's Test of Sphericity	Approx. Chi-Square	301.896
	df	120
	Sig.	.000

The adequacy of the data is evaluated on the basis of the results of Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity.The KMO measure of sampling adequacy is .678 indicating that the present data are suitable for factor analysis. Bartlett's Test of Sphericity is significant ($p<.001$), indicating sufficient correlation exists, between variables for the factor analysis. The Bartlett's Test statistics is approximately distributed and is accepted.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.901	24.379	24.379	3.901	24.379	24.379	3.499	21.867	21.867
2	2.561	16.006	40.386	2.561	16.006	40.386	2.682	16.764	38.632
3	2.330	14.561	54.947	2.330	14.561	54.947	2.355	14.716	53.348
4	1.667	10.422	65.369	1.667	10.422	65.369	1.717	10.729	64.077
5	1.415	8.843	74.212	1.415	8.843	74.212	1.499	9.367	73.444
6	1.002	6.260	80.472	1.002	6.260	80.472	1.124	7.028	80.472
7	.924	5.776	86.248						
8	.744	4.653	90.901						
9	.464	2.898	93.799						
10	.255	1.592	95.390						
11	.245	1.531	96.922						
12	.211	1.319	98.241						
13	.142	.887	99.127						
14	.077	.484	99.611						
15	.047	.294	99.905						
16	.015	.095	100.000						

Extraction Method: Principal Component Analysis.

The first 4 components i.e. factors in the above table have an Eigen values over 1.5 and they account for about 65 percent of the observed variation in the consumers' risk perception about internet banking. The factor analysis revealed four factors underlying consumer risk perception about internet banking i.e physical risk, financial risk, time risk, functional risk.

HYPOTHESES TESTING

Regression analysis was employed for testing the hypothesis of this research after extraction of four independent variables from factor analysis. Results of this study indicated that 33.8% of variance of consumer risk perception about internet banking was explained by these four independent variables with a significant F value of 5.873 being significant at $p<0.000$. Therefore, there is an evident that these four factors significantly affect the consumer attention about internet banking. The result of hypotheses testing may be shown as: Coefficients values of regression analysis of four factors

H1: Financial risk certainly influences Internet banking avoidance.
H2: Physical risk certainly influences Internet banking avoidance
H3: Time risk certainly influences Internet banking avoidance.
H4: Functional risk certainly influences Internet banking avoidance.

Negative attitude toward internet banking ($\beta=0.198$, $p<0.05$), financial risk ($\beta=0.125$,$p< .05$), physical risk ($\beta= 0.231$, $p<0.05$), time risk ($\beta=0.187$, $p<0.05$),functional risks ($\beta= 0.126$, $p<0.05$) significantly and positively affect internet banking prevention Consequently, H1, H2, H3, H4 are fully supported.

Overall Model summary of Regression Analysis

Model	R	R-square	Adjusted R-square	Std. error of the estimate	Durbin-Watson
1	0.581	0.338	0.280	0.848223824	1.505

Analysis of Variance (ANOVA) of critical factors

Model	Variables	Sum of squares	df	Mean square	F	Sig.
1	Regression	16.903	4	4.226	5.873	0.000
	Residual	33.097	46	0.720		
	Total	50.000	50			

Regression Results on Predicting on attitudes towards Internet Banking

	β	t	p
Negative Attitude towards Internet Banking	0.198	3.245	0.001
Financial Risk	0.125	2.033	0.043
Physical Risk	0.231	3.820	0.000
Time Risk	0.187	3.065	0.002
Functional Risk	0.126	2.048	0.042

CONCLUSIONS

The risk barrier was the only one which was identified in customer's perception. The confrontation of the customers with no intention to use the service in the future is strong and miscellaneous. Different customers' concerns about Internet banking were mainly functional in nature; among these customers psychological factors also cause resistance. Their resistance is so wide-ranging that it is not possible to condense it into a few factors. In spite of their intense resistance they seem to think that Internet banking does offer some benefits to consumers. They seem to consider Internet banking service to be economical and at least part of them think that the service is a good alternative at the side of traditional banking services. This study also makes significant contribution to knowledge in relation to consumer's perception of the problems and prospects of Internet banking. Banks need more media hype about the security level and rules and regulation related to security. They can do so by education and advertising through the mass media. When scam cases occur through the use of Internet banking, bank should protect the bank customers.

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